

The background of the advertisement is a dark, monochromatic photograph of several jellyfish. The jellyfish are translucent with visible internal structures and are scattered across the frame, some appearing larger and more detailed than others. The overall aesthetic is scientific and naturalistic.

Life Sciences

Books and Journals from
Cambridge University Press

Cambridge is one of the leading publishers in ecology and conservation biology and publishes high quality texts and research across the breadth of the life sciences, focusing particularly on animal behaviour, biological anthropology, evolutionary biology, computational and systems biology, as well as statistics and professional development titles for biologists.

We also have an extensive portfolio of established journals in agriculture, ecology and conservation, and animal science.

For further details visit:
[cambridge.org/core-life-sciences](https://www.cambridge.org/core-life-sciences)

Cambridge
Core



CAMBRIDGE
UNIVERSITY PRESS



Medicine

Books and Journals from
Cambridge University Press

The Cambridge Medicine programme focuses its book publishing in a defined set of core clinical areas with our great strength in the clinical brain sciences. Other specialties of significant focus include reproductive medicine/obstetrics and gynaecology, anaesthesia and critical care, emergency medicine and pathology.

Our journals programme covers a broad spectrum of medical disciplines including emergency and disaster medicine, epidemiology and infectious diseases, biomedical science, genetics, nutrition, mental health and psychiatry, and neuroscience.

We partner with many learned societies including The Society for Healthcare Epidemiology of America, and the Neuroscience Education Institute, and the Royal College of Obstetricians and Gynaecologists.

For further details visit:

[cambridge.org/core-medicine](https://www.cambridge.org/core-medicine)

Cambridge
Core



CAMBRIDGE
UNIVERSITY PRESS

Parasitology

Back volumes. Vols. 1–71: Inquiries should be addressed to Wm. Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Vols. 72 onwards: quotations for parts still in print may be obtained from Cambridge or the American Branch of Cambridge University Press.

Copying. This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0031–1820/2017 \$16.00.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

ISI Tear Sheet Service. 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Claims for missing issues can only be considered if made immediately after receipt of the subsequent issue.

Advertising. Details of advertising in *Parasitology* may be obtained from the publisher.

Online submission. Authors are encouraged to submit their manuscripts online. Go to <http://mc.manuscriptcentral.com/par/> to open an author's account for *Parasitology*. Manuscript Central is helping to improve the speed of the publication process for the journal.

Front Cover illustration: Role of actin in sexual development in *Eimeria maxima*. From Frolich and Wallach, Vol. 142 (7) pp. 855–864.

© Cambridge University Press 2017

University Printing House, Cambridge CB2 8BS, United Kingdom
1 Liberty Plaza, Floor 20, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
C/ Orense, 4, Planta 13 28020 Madrid, Spain
Lower Ground Floor, Nautica Building, The Water Club, Beach Road,
Granger Bay, 8005 Cape Town, South Africa

Printed in the UK by Bell & Bain

PARASITOLOGY

CONTENTS

REVIEW ARTICLE

Why calpain inhibitors are interesting leading compounds to search for new therapeutic options to treat leishmaniasis?

Vitor Ennes-Vidal, Rubem Figueiredo Sadock Menna-Barreto, Marta Helena Branquinho, André Luis Souza Dos Santos and Claudia Masini d'Avila-Levy 117

RESEARCH ARTICLES

Potential immunological markers for diagnosis of human strongyloidiasis using heterologous antigens

M.A. Corral, F.M. Paula, D.M.C.L. Meisel, V.L.P. Castilho, E.M.N. Gonçalves, D. Levy, S.P. Bydlowski, P.P. Chieffi, W. Castro-Borges and R.C.B. Grysczek 124

Loads of trematodes: discovering hidden diversity of paramphistomoids in Kenyan ruminants

Martina R. Laidemitt, Eva T. Zawadzki, Sara V. Brant, Martin W. Mutuku, Gerald M. Mkoji and Eric S. Loker 131

Nerolidol-loaded nanospheres prevent hepatic oxidative stress of mice infected by *Trypanosoma evansi*

Matheus D. Baldissera, Carine F. Souza, Thirssa H. Grando, Geisa S. Dolci, Luciana F. Cossetin, Karen L.S. Moreira, Marcelo L. da Veiga, Maria Izabel U.M. da Rocha, Aline A. Boligon, Marii M.A. de Campos, Lenita M. Stefani, Aleksandro S. da Silva and Silvia G. Monteiro 148

Motility, morphology and phylogeny of the plasmodial worm, *Ceratomyxa vermiformis* n. sp. (Cnidaria: Myxozoa: Myxosporea)

E. A. Adriano and B. Okamura 158

Parasites of the Brazilian flathead *Percophis brasiliensis* reflect West Atlantic biogeographic regions

Paola E. Braicovich, Camila Pantoja, Aldenice N. Pereira, Jose L. Luque and Juan T. Timi 169

Activity of two extracts of *Cynanchum paniculatum* against *Ichthyophthirius multifiliis* theronts and tomites

Wen Ji-Hong, Wang Yan-Li, Liu Yu-Hua, Zhang Ji-Yuan and Li Ze-Hong 179

***Hyperspora aquatica* n.g.n., n.sp. (Microsporidia), hyperparasitic in *Marteilia cochillia* (Paramyxida), is closely related to crustacean-infecting microsporidian taxa**

G.D. Stentiford, A. Ramilo, E. Abollo, R. Kerr, K.S. Bateman, S.W. Feist, D. Bass and A. Villalba 186

Predictability of helminth parasite host range using information on geography, host traits and parasite community structure

Tad Dallas, Andrew W. Park and John M. Drake 200

Nuclear and mitochondrial DNA analysis reveals that hybridization between *Fasciola hepatica* and *Fasciola gigantica* occurred in China

Madoka Ichikawa-Seki, Mao Peng, Kei Hayashi, Takuya Shoriki, Uday Kumar Mohanta, Toshiyuki Shibahara and Tadashi Itagaki 206

In vitro* and *ex vivo* activity of *Melaleuca alternifolia* against protozoocoles of *Echinococcus ortleppi

Danieli Urach Monteiro, Maria Isabel Azevedo, Carla Weiblen, Sônia de Avila Botton, Nadine Lysyk Funk, Cristiane de Bona da Silva, Régis Adriel Zanette, Thiago Guilherme Schwanz and Mário Luiz de la Rue 214

Molecular characterization and detection of variants of *Taenia multiceps* in sheep in Turkey

Betul Sonmez, Ergun Koroglu and Sami Simsek 220

***Orientattractis moraveci* n. sp. and *Rondonia rondoni* Travassos, 1920 (Nematoda: Atractidae), parasites of *Pimelodus blochii* (Osteichthyes, Pimelodidae) from the Acre and Xapuri Rivers, Western Amazon, Brazil**

Pedro H.O. Cavalcante, Maralina T. Silva, Everton G.N. Santos, Vanessa A. Chagas-Moutinho and Claudia P. Santos 226

Rumen fluke (*Calicophoron daubneyi*) on Welsh farms: prevalence, risk factors and observations on co-infection with *Fasciola hepatica*

Rhys Aled Jones, Peter M. Brophy, E. Sian Mitchell and Hefin Wyn Williams 237

Between-individual variation in nematode burden among juveniles in a wild host

H.M.V. Granroth-Wilding, F. Daunt, E.J.A. Cunningham and S.J. Burthe 248